

WEST VALLEY COLLEGE
Course Outline

Department: Architecture

Course Number and Title: ARCH 055 - Architectural Building Codes

Length of course in weeks: 16

Units: 5

Total Class Hours/Week: 5

Lecture Hours/Week: 5

Grade Type: Grade/Credit/No Credit

Catalog Description: This course covers the building permit process and definition of building codes as described in the International Building Code. The course emphasizes use and occupancy, special use and occupancy, building heights and areas, types of construction, fire-resistive construction, interior finishes, fire-protection systems, means of egress, accessibility, interior environment, energy efficiency, exterior walls, roof assemblies, structural provisions, building materials and systems, and existing structures.

Schedule Description: This course covers the building permit process and definition of building codes as described in the International Building Code.

Course Outcomes: Student Learning Outcomes

Outcome: Students will be able to compare and contrast building examples with respect to proper compliance with building codes and code violations.

Assessment: Final presentation.

Course Objectives: Upon completion of this course the student should be able to:

1. Identify different groups of occupancy from existing construction.
2. Identify different construction types.
3. Identify building means of egress and fire protection requirements.
4. Identify the proper code applications of foundations, walls, roofs, floor materials to existing buildings.
5. Submit a building permit application.

Assessment: Students in this course will be graded based on the following four categories:

1. **Writing Assignments:** reading report(s)
2. **Problem Solving Demonstrations:** homework problems and field work
3. **Skill Demonstrations:** class & exam performances, and field work report
4. **Examinations:** multiple choice

Repeatability: 1 time

Methods of Instruction: Lecture or Online

Lecture Content:

1. Building Codes	5.00 %
2. Navigating the Code	5.00 %
3. Use and Occupancy	5.00 %
4. Special Uses and Occupancies	5.00 %
5. Building Heights and Areas	5.00 %
6. Types of Construction	5.00 %
7. Fire-Resistive Construction	5.00 %
8. Interior Finishes	10.00 %
9. Fire-Protection Systems	5.00 %
10. Means of Egress	5.00 %
11. Accessibility	5.00 %
12. Interior Environments	5.00 %
13. Energy Efficiency	5.00 %
14. Exterior Walls	5.00 %
15. Roof Assemblies	10.00 %
16. Structural Provisions	5.00 %
17. Building Materials and Systems	5.00 %
18. Existing Structures	5.00 %

Critical Thinking: Analyze building examples for proper compliance with building codes and code violations.

College Level Required Reading, Writing, and other Outside-of-Class Assignments:

Over a 16 week presentation of the course, three hours per week are required for each unit of credit. Two hours of independent work done out of class are required for each hour of lecture. Outside of the regular class time the students in this class will be doing the following outside of class:

- **Study:** 2.00 additional hours
- **Problem solving activity or exercise:** 2.00 additional hours
- **Practice Skills:** 2.00 additional hours
- **Observation/Participation:** 2.00 additional hours
- **Answer questions:** 2.00 additional hours

Textbook:

Ching Francis D. K., Winkel Steven R. Building Codes Illustrated: A Guide to Understanding the 2006 International Building Code. 2nd edition. John Wiley and Sons Inc., 2006. ISBN: 9780471741893